NOTICE OF 30-DAY PERIOD
FOR PUBLIC COMMENT

Preliminary Findings Regarding a Part 70 Permit
Significant Source Modification

for Dalton Corporation Kendallville Manufacturing Facility
in Noble County

Part 70 No.: T113-6491-00004
Significant Source Modification No.: 113-12446

Notice is hereby given that the above-mentioned company, located at 200 West Ohio Street, Kendallville, Indiana, 46755, has made application to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) for a Significant Source Modification to a Part 70 source for a new core machine.

Notice is hereby given that there will be a period of thirty (30) days from the date of publication of this notice during which any interested person may comment on why this proposed source modification should or should not be issued. Appropriate comments should be related to any air quality issues, interpretation of the state and federal rules, calculations made, technical issues, or the effect that the operation of this source would have on any aggrieved individuals. IDEM, OAM does not have jurisdiction in specifying and implementing requirements for zoning, odor or noise. For such issues, please contact your local officials.

A copy of the application and draft source modification is available for examination at the Kendallville Public Library, 126 West Rush Street, Kendallville, Indiana, 46755. A copy of the draft source modification is also available for examination at www.state.in.us/idem/oam/index.html. All statements, along with supporting documentation, should be submitted in writing to the IDEM, OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana 46206-6015. If adverse comments concerning the **air pollution impact** of this draft source are received, together with a request for a public hearing, such a hearing may be held to give further consideration to this application.

Persons not wishing to comment at this time, but wishing to receive notice of future proceedings conducted related to this action, must submit a written request to the OAM, at the above address. All interested parties of record will receive a notice of the decision on this matter and will then have fifteen (15) days after receipt of the Notice of Decision to file a petition for administrative review. Procedures for filing such a petition will be enclosed with the Notice.

Questions should be directed to Nisha Sizemore, OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, press 0 and ask for Nisha Sizemore or extension 2-8356, or dial (317) 232-8356.

Paul Dubenetzky, Chief

Permits Branch
Office of Air Management

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PART 70 SIGNIFICANT SOURCE MODIFICATION
OFFICE OF AIR QUALITY

Dalton Corporation Kendallville Manufacturing Facility
200 West Ohio Street
Kendallville, Indiana 46755

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 113-12446-00004	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date:

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Quarterly Reports

SECTION A SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary gray iron foundry.

Responsible Official:	Mark Rees, General Manager
Source Address:	200 West Ohio Street, Kendallville, Indiana 46755
Mailing Address:	200 West Ohio Street, Kendallville, Indiana 46755
SIC Code:	3321
County Location:	Noble
County Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source under PSD Rules; Major Source, Section 112 of the Clean Air Act; 1 of the 28 listed source categories (secondary metal production facility)

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

One (1) Isocure core machine, identified as core machine #33, with a maximum capacity of 3 tons of cores per hour, with the triethylamine (TEA) emissions controlled by a scrubber, and exhausting to stack T. A core box cleaner and parting spray will also be used with the core machine.

Notes: The new core machine will be installed as part of the Isocure core making process line #1, which also includes the following existing emission units:

(a) South muller (sand mixer) #1, with a maximum capacity of 12 tons of sand per hour, which supplies the sand/resin mixture to the core machines;
(b) Isocure core machines #30, #31, and #32, each with a maximum capacity of 3 tons of cores per hour and exhausting to stack T;
(c) The core wash dip tanks, with emissions exhausting inside the building;
(d) Two (2) natural gas fired core drying ovens;
(e) One (1) natural gas fired double core drying oven; and
(f) The core sand handling system for the south mixer line, which consists of a fifty (50) ton capacity core sand silo controlled upon loading by a bin vent (which is integral to the system); the core sand is gravity fed via pipeline from the silo to an enclosed hopper. From there the core sand is gravity fed from the hopper to the mixer where it is mixed with resin. This entire process makes up the core sand handling system.

The installation of the new core machine will result an increased utilization of the existing sand muller #1, the existing core sand handling system, and the existing core wash dip tanks.

On June 30, 2000, Dalton Corporation Kendallville Manufacturing Facility (here after referred to as Dalton) submitted an application to the OAQ requesting to add a new Isocure core machine to their existing plant. An interim permit to construct the new core machine was approved on November 22, 2000 and became effective on December 3, 2000. The source was also issued a permit, identified as Significant Source Modification 113-11488-00004, to construct and operate another core machine, identified as core machine #16, on November 23, 1999. The approval for core machine #16 included limits for VOC emissions in order to render the requirements of PSD not applicable. Dalton has agreed that the construction of these two core machines should now be considered as one single modification for the purposes of PSD review. Dalton has requested limits on both machines sufficient to render the requirements of PSD not applicable. Therefore, it will be necessary to adjust the limits for core machine #16, that were previously set in Significant Source Modification 113-11488-00004. This new permit includes new limits for both core machines #16 and #33 in order to render PSD not applicable.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this approval shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

B.2 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.3 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.4 Significant Source Modification [326 IAC 2-7-10.5(h)]

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

(a) The attached affidavit of construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed.

(b) If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.

(c) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

(d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.

In the event that the Title V application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:

(1) If the Title V draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Title V draft.

(2) If the Title V permit has gone thru final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go thru a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Title V permit at the time of issuance.

(3) If the Title V permit has not gone thru final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the proposed Title V permit, and the Title V permit will issued after EPA review.

B.5 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the

certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

(a) Where specifically designated by this approval or required by an applicable requirement, any application form, report, or compliance certification submitted under this approval shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this approval, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) upon startup of the new emission unit, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond the Permittee's control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are

available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this approval.

(b) Any application requesting an amendment or modification of this approval shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this approval:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute, rule, or in this approval, all air pollution control equipment listed in this approval and used to comply with an applicable requirement shall be operated at all times that the emission unit vented to the control equipment is in operation.

Testing Requirements [326 IAC 2-7-6(1)]

C.6 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

(a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Compliance Requirements [326 IAC 2-1.1-11]

C.7 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.8 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

If required by Section D, all monitoring and record keeping requirements not already legally required shall be implemented when operation begins. Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

C.9 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less often than once an hour until such time as the continuous monitor is back in operation.

(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.10 Pressure Gauge Specifications and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

(a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the

expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(b) Whenever a condition in this permit requires the measurement of a flow rate or pH level, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.11 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole of information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the Compliance Monitoring Plan are:

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this approval;

(3) The Compliance Monitoring Requirements in Section D of this approval;

(4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this approval; and

(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this approval. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared upon startup of the new emission unit by the Permittee and maintained on site, and is comprised of:

(A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this approval; and

(B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(b) For each compliance monitoring condition of this approval, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to reasonable response steps may constitute a violation of the approval.

(c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:

(1) A false reading occurs. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the approval conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the approval, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned to operating within "normal" parameters and no response steps are required.

(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.12 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this approval exceed the level specified in any condition of this approval, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the response actions are being implemented. IDEM, OAQ shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate approval conditions may be grounds for immediate revocation of the approval to operate the affected facility.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.13 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

(a) Records of all required data, reports, and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance.

C.14 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) The reports required by conditions in Section D of this approval shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Unless otherwise specified in this approval, any notice, report, or other submission required by this approval shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) Unless otherwise specified in this approval, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The report does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(d) The first report shall cover the period commencing on the date of issuance of this approval and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

One (1) Isocure core machine, identified as core machine #33, with a maximum capacity of 3 tons of cores per hour, with the triethylamine (TEA) emissions controlled by a scrubber, and exhausting to stack 74. A core box cleaner and parting spray will also be used with the core machine.

Notes: The new core machine will be installed as part of the Isocure core making process line #1, which also includes the following existing emission units:

(a) South muller (sand mixer) #1, with a maximum capacity of 12 tons of sand per hour, which supplies the sand/resin mixture to the core machines;
(b) Isocure core machines #30, #31, and #32, each with a maximum capacity of 3 tons of cores per hour and exhausting to stack T;
(c) The core wash dip tanks, with emissions exhausting inside the building;
(d) Two (2) natural gas fired core drying ovens;
(e) One (1) natural gas fired double core drying oven; and
(f) The core sand handling system for the south mixer line, which consists of a fifty (50) ton capacity core sand silo controlled upon loading by a bin vent (which is integral to the system); the core sand is gravity fed via pipeline from the silo to an enclosed hopper. From there the core sand is gravity fed from the hopper to the mixer where it is mixed with resin. This entire process makes up the core sand handling system.

The installation of the new core machine will result in an increased utilization of the existing sand muller #1, the existing core sand handling system, and the existing core wash dip tanks.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the core sand handling system shall not exceed 21.6 pounds per hour when operating at a process weight rate of 12.0 tons per hour. The pounds per hour limitation was calculated using the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

D.1.2 VOC, PM, PM10 and HAPs Limits [326 IAC 2-2] [326 IAC 8-1-6] [326 IAC 2-4.1-1]

In order to render the requirements of 326 IAC 8-1-6 (BACT), 326 IAC 2-4.1-1 (New Source Toxics Control), and 326 IAC 2-2 (PSD) not applicable, the following conditions shall apply:

(a) The maximum TEA emissions for each of the core machines #16 and #33 shall not exceed 0.252 pounds per ton of core sand.

(b) The total VOC emissions from each of the core machines #16 and #33 shall not exceed 0.49 pounds per ton of core sand.

(c) The PM emissions from the bin vent controlling the core sand handling process shall not exceed 1.354 pounds per ton of core sand.

(d) The PM10 emissions from the bin vent controlling the core sand handling process shall not exceed 0.790 pounds per ton of core sand.

(e) The VOC emissions from the South muller #1 shall not exceed 0.65 pound per ton of core sand.

(f) The sand throughput to the South muller #1 shall not exceed 35,450 tons per 12 consecutive month period.

(g) The core wash solvent used in the core wash dip tanks #16 and #33 shall contain no VOCs.

Compliance with (a) above is equivalent to TEA emissions of less than 10 tons per year; therefore, the requirements of 326 IAC 2-4.1-1 (New Source Toxics Control) will not apply. Compliance with (c) and (d) above is equivalent to PM and PM10 emissions of 24 and 14 tons per year respectively; therefore, the requirements of 326 IAC 2-2 and 40 CFR 52.21 (PSD) will not apply. Compliance with (a), (b), (e), (f), and (g) above is equivalent to less than 25 tons per year of VOC; therefore the requirements of 326 IAC 8-1-6 (BACT) and 326 IAC 2-2 and 40 CFR 52.21 (PSD) will not apply.

This permit shall supersede Condition D.1.1 of Source Modification 113-11448-00004 issued on January 14, 2000.

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the acid scrubber, core sand handling system and bin vent filter.

Compliance Determination Requirements

D.1.4 Particulate Matter (PM)

(a) In order to comply with D.1.1 and D.1.2(c) and (d), the bin vent filter for PM control shall be in operation and control emissions from the core sand loading system at all times that the core sand loading system is in operation.

(b) In order to comply with D.1.2(a) and (b), the acid scrubber for triethylamine (TEA) control shall be in operation and control emissions from the core machines #16 and #33 at all times that the either core machine is in operation.

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within 60 days after core machine #33 achieves maximum production rate, but no later than 180 days after initial start-up the Permittee shall perform testing as shown in the following table, using methods as approved by the Commissioner, in order to demonstrate compliance with condition D.1.2. Testing shall be conducted in accordance with Section C - Performance Testing.

Facility	Pollutants	Limits
core machine #33	TEA	0.252 pounds TEA per ton of core sand
	Total VOCs	0.49 pounds total VOC per ton of core sand
South muller #1	VOC	0.65 pound per ton of core sand

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.6 Visible Emissions Notations

(a) Visible emission notations of the bin vent exhaust shall be performed once per shift during normal daylight hours when loading of the core sand silo occurs. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.1.7 Bin Vent Filter Inspections

An inspection shall be performed each calender quarter of the bin vent filter to the silo. All defective filters shall be replaced.

D.1.8 Broken or Failed Bin Vent Detection

In the event that filter failure of the bin vent has been observed, the failed unit and the associated process will be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.1.9 Scrubber Parametric Monitoring

The Permittee shall monitor and record the pressure drop, flow rate, and pH level of the scrubber, at least once per shift. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the scrubber shall be maintained within the range of 0.5 to 3 inches of water or a range established during the latest stack test. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the flow rate shall be

maintained at a minimum of 200 gallons per minute or a minimum flow rate established during the latest stack test. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pH level shall be maintained at a maximum level of 4.5 or a maximum level established during the latest stack test. The Compliance Response Plan for the scrubber shall contain troubleshooting contingency and response steps for when the pressure drop reading is outside of the normal range for any one reading, or the flow rate is below the normal minimum for any one reading, or the pH level is above the normal maximum for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instruments used for determining the pressure, flow rates, and pH levels shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.10 Scrubber Inspections

An inspection shall be performed each calender quarter of the scrubber controlling the core machines. All defective scrubber parts shall be replaced.

D.1.11 Scrubber Failure

In the event that scrubber failure has been observed:

(a) The affected process will be shut down immediately until the failed unit has been replaced. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.12 Record Keeping Requirements

(a) To document compliance with Condition D.1.6, the Permittee shall maintain records of visible emission notations of the bin vent exhaust once per shift.

(b) To document compliance with Condition D.1.7, the Permittee shall maintain records of the results of the inspections required under Condition D.1.7 and the dates the vents are redirected.

(c) To document compliance with Condition D.1.2(f), the Permittee shall maintain records of the sand throughput to the mixer #1. For all core wash solvents used in conjunction with the core wash dip tanks #16 and #33, the source shall keep the material safety data sheets (MSDS) or other documentation showing the VOC content of each solvent used.

(d) To document compliance with Condition D.1.9, the Permittee shall maintain records of the pressure drop, flow rate, and pH readings of the scrubber once per shift.

(e) To document compliance with Conditions D.1.10, the Permittee shall maintain records of the results of the inspections required under Conditions D.1.10 and the number and type of any parts replaced.

(f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.13 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.2 (f) shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or the equivalent, within thirty (30) days after the end of the quarter being reported.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name: Dalton Corporation Kendallville Manufacturing Facility
Source Address: 200 West Ohio Street, Kendallville, Indiana 46755
Mailing Address: 200 West Ohio Street, Kendallville, Indiana 46755
Source Modification No.: 113-12446-00004

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Affidavit (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Source Modification Quarterly Report

Source Name: Dalton Corporation Kendallville Manufacturing Facility
Source Address: 200 West Ohio Street, Kendallville, Indiana 46755
Mailing Address: 200 West Ohio Street, Kendallville, Indiana 46755
Source Modification No.: 113-12446-00004
Facility: South Muller #1
Parameters: Sand throughput
Limit: 35,450 tons of sand per 12 consecutive month period

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to this report.

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the
Technical Support Document for a Significant Source Modification
to a Part 70 Operating Permit

Source Name:	Dalton Corporation, Kendallville Manufacturing Facility.
Source Location:	200 West Ohio Street, Kendallville, IN 46755
County:	Noble
SIC Code:	3321
Operation Permit No.:	T113-6491-00004
Operation Permit Issuance Date:	not yet issued
Significant Source Modification No.:	113-12446-00004
Permit Reviewer:	Nisha Sizemore

On December 20, 2000, the Office of Air Quality (OAQ) had a notice published in The Kendallville News-Sun, Kendallville, Indiana, stating that Dalton Corporation, Kendallville Manufacturing had applied for a significant source modification to a Part 70 Operating Permit to operate a new core machine. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On January 18, 2001, Lisa McCoy, Dalton Corporation, Kendallville Manufacturing, submitted comments on the proposed significant source modification to the Part 70 permit. A summary of the comments is as follows:

Section A

Comment #1

No law or regulation requires that all construction projects done within a period of 18 months are to be considered one project. Dalton agreed that this project was to be considered one project. The following sentence “Since [the] this new core machine, identified as core machine #33, is being constructed within 18 months after the start of construction of core machine #16, it is necessary to review the emissions from both machines in order to determine PSD applicability” should, therefore, be deleted.

Response #1

Consistent with EPA guidance, IDEM typically does review permit applications submitted by the same source within the same 18 month time frame to determine whether they should be combined and reviewed as a single modification. However, IDEM agrees that it is not necessary to include this statement in the permit, since the statement has already been included in the technical support document. The requested change has been made to Section A.2, as shown below.

> On June 30, 2000, Dalton Corporation Kendallville Manufacturing Facility (here after referred to as Dalton) submitted an application to the OAQ requesting to add a new Isocure core machine to their existing plant. An interim permit to construct the new core machine was approved on November 22, 2000 and became effective on December 3, 2000. The source was also issued a permit, identified as Significant Source Modification 113-11488-00004, to construct and operate another core machine, identified as core machine #16, on November 23, 1999. The approval for core machine #16 included limits for VOC emissions in order to render the requirements of PSD not applicable. ~~Since the this new core machine, identified as core machine #33, is being constructed within 18 months after the start of construction of core machine #16, it is necessary to review the emissions from both machines in order to determine PSD applicability.~~ Dalton has agreed that the construction of these two core machines should now be considered as one single modification for the purposes of PSD review. Dalton has requested limits on both machines sufficient to render the requirements of PSD not applicable. Therefore, it will be necessary to adjust the limits for core machine #16, that were previously set in Significant Source Modification 113-11488-00004. This new permit includes new limits for both core machines #16 and #33 in order to render PSD not applicable.

Comment #2

Facility Description There appears to be a misconception regarding the control and operation of the "core sand handling process". Sand is pneumatically loaded into the core sand silo. The silo has an integral bin vent that controls PM/PM10 to prevent loss of the raw material during loading of the core sand into the silo. There are no emissions from the bin vent during the transport of the sand to the mixer. The sand is gravity fed from the silo to the sand mixer. The sand first flows through a sand heater contained within a pipe and is discharged into an enclosed hopper. When sand is needed by the mixer, it gravity feeds out of the hopper into the mixer. Any emissions involved in transport to the mixer are negligible due to the enclosure of the system. The sand is then mixed with resin in the mixer and from that point the PM/PM10 emissions are minor due to the cohesiveness of the sand. There is no baghouse controlling emissions as indicated in the permit. The bin vent controls the PM/PM10 emissions from the silo upon loading.

The facility description should be revised to add a core sand handling description as follows:

"The core sand handling system for the south mixer line consists of a fifty (50) ton capacity core sand silo controlled upon loading by a bin vent (which is integral to the system); the core sand is gravity fed via pipeline from the silo to an enclosed hopper. From there the core sand is gravity fed from the hopper to the mixer where it is mixed with resin. The PM/PM10 emissions from that point are negligible due to the cohesiveness of the sand."

The current description #1 should also be revised to add that the maximum capacity of the mixer is twelve (12) tons.

The current description should be revised to state that emissions from the core machine are uncontrolled and exhaust to stack 74.

The facility description should also be revised to identify the following insignificant activities associated with the Isocure core machines:

"One (1) Isocure core machine, identified as core machine #33, with a maximum capacity of 3 tons of cores per hour, with emissions uncontrolled and exhausting to stack T. The Isocure core making process utilizes a core wash, parting spray and core box cleaner which are considered insignificant activities according to 326 IAC 2-1.1-3(d)(1)(D) where potential VOC emissions from a new process which are less than 10 tons per year are considered exempt."

Response #2

The facility descriptions have been added to Sections A.2 and D.1 of the permit. IDEM does not agree that the core wash, parting spray and core box cleaners are separate insignificant activities. All of these activities are an integral part of the operation of the core machine; therefore, all emissions from these activities have been aggregated together, along with the emissions from the binder used when producing the core. IDEM does not believe it is appropriate to divide up the emissions from the individual steps in the coremaking process. To do so could result in the inappropriate designation of the entire coremaking process as several individual insignificant activities.

Changes to the permit are shown below.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

One (1) Isocure core machine, identified as core machine #33, with a maximum capacity of 3 tons of cores per hour, with emissions uncontrolled and exhausting to stack ~~73~~ **T**. **A core box cleaner and parting spray will also be used with the core machine.**

Notes: The new core machine will be installed as part of the Isocure core making process line #1, which also includes the following existing emission units:

(1) South muller (sand mixer) #1, **with a maximum capacity of 12 tons of sand per hour,** which supplies the sand/resin mixture to the core machines;
(2) Isocure core machines #30, #31, and #32, each with a maximum capacity of 3 tons of cores per hour and exhausting to stack ~~73~~ **T**;
(3) The core wash dip tanks, with emissions exhausting inside the building;
(4) Two (2) natural gas fired core drying ovens; ~~and~~
(5) One (1) natural gas fired double core drying oven; **and**
(6) The core sand loading system for the south mixer line, which consists of a fifty (50) ton capacity core sand silo controlled upon loading by a bin vent (which is integral to the system); the core sand is gravity fed via pipeline from the silo to an enclosed hopper. From there the core sand is gravity fed from the hopper to the mixer where it is mixed with resin. This entire process makes up the core sand handling system.

The installation of the new core machine will result **in** an increased utilization of the existing sand muller #1, **the existing core sand handling system,** and the existing core wash dip tanks.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

One (1) Isocure core machine, identified as core machine #33, with a maximum capacity of 3 tons of cores per hour, with emissions uncontrolled and exhausting to stack ~~73~~ **74**.

Notes: The new core machine will be installed as part of the Isocure core making process line #1, which also includes the following existing emission units:

(a) South muller (sand mixer) #1, **with a maximum capacity of 12 tons of sand per hour,** which supplies the sand/resin mixture to the core machines;
(b) Isocure core machines #30, #31, and #32, each with a maximum capacity of 3 tons of cores per hour and exhausting to stack ~~73~~ **74**;
(c) The core wash dip tanks, with emissions exhausting inside the building;
(d) Two (2) natural gas fired core drying ovens; ~~and~~
(e) One (1) natural gas fired double core drying oven; **and**
(f) **The core sand handling system for the south mixer line, which consists of a fifty (50) ton capacity core sand silo controlled upon loading by a bin vent (which is integral to the system); the core sand is gravity fed via pipeline from the silo to an enclosed hopper. From there the core sand is gravity fed from the hopper to the mixer where it is mixed with resin.**

The installation of the new core machine will result an increased utilization of the existing sand muller #1, **the existing core sand handling system,** and the existing core wash dip tanks.

Comment #3

Condition D.1.2 (d) should be deleted as the additional VOC emissions generated at the core machine or respective dip tank are considered insignificant activities according to 326 IAC 2-1.1-3(d)(1)(D).

Response #3

Total potential VOC emissions from the core machines are well above exemption levels. The designation of a facility as a significant or insignificant activity is based on the total emissions from the activity in question, not just the emissions of one single pollutant, or in this case, a portion of the VOCs. This condition (now renumbered D.1.2(b)) limits the total VOC emissions from each of the core machines to less than the applicability levels of 326 IAC 8-1-6 (BACT) and 326 IAC 2-2 (PSD). There has been no change to the permit as a result of this comment.

Comment #4

Condition D.1.3 (Preventive Maintenance Plan) should be deleted as there is no baghouse to maintain. The silo is controlled by a bin vent.

Response #4

The bin vent is required for the source to comply with the emission limits in the permit. Since there is preventive maintenance that can be done to prevent bin vent filter failure, IDEM has revised the condition to require a PMP for the bin vent.

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the core sand handling system and ~~baghouse~~ **bin vent filter**.

Comment #5

Condition D.1.4 should be revised as follows: "In order to comply with D.1.2 (e) and (f), the bin vent for PM/PM10 control shall be in operation controlling emissions at all times that the core sand loading is occurring."

Response #5

IDEM agrees and has made the appropriate change as shown below.

D.1.4 Particulate Matter (PM)

In order to comply with D.1.1 and D.1.2, the ~~baghouse~~ **bin vent** for PM control shall be in operation and control emissions from the core sand handling system at all times that the core sand handling system is in operation.

Comment #6

Regarding Condition D.1.5 (Testing Requirements), the source needs clarification on how to comply with this section. It is not clear what tests are being required to be conducted or why. There is no stack on the south mixer or controls on the south mixer and the core machine. How does one stack test without a stack?

Is it necessary to test each core machine to determine the amount of TEA gas capable of being used? If you know the maximum capacity of the core machine for sand, why can't you extrapolate from that the amount of TEA necessary to provide a catalyst for that amount of sand based on the resin used? Isn't vendor information regarding emissions credible? If Dalton is not permitted to certify compliance with this type of information, is IDEM permitted to find a violation without a stack test?

The mixer does not run continuously. It mixes in batches. How does one test a batch run operation for three one-hour runs?

The emission factors used to calculate the maximum VOCs emitted from the mixer were developed by the resin supplier using the OCMA protocol. Why are these mass balance calculations not credible to certify compliance?

This section also requires that these tests shall be repeated at least once every five (5) years. If initial testing is required, will repeat testing be necessary even if the results show that the VOC emissions are nowhere near the limits?

The total VOC emission testing requirement for core machine #33 should be deleted since the total VOC emissions excluding the TEA gas emissions are insignificant and considered exempt according to 326 IAC 2-1.1-3(d)(1)(D).

Note: Subsequent to the source submitting the above comment, the source revised their application to include the installation and operation of an acid scrubber to control TEA emissions from the core machines.

Response #6

The source should work with staff in IDEM's Compliance Data Section to determine how to properly conduct the stack tests required by this permit. Typically when a source is required to perform stack testing on

uncontrolled emissions that do not vent through a stack, the source is required to construct a temporary enclosure and stack for the purpose of completing the stack testing. The duration of each of the three test runs should also be determined during protocol review.

Total potential VOC emissions from the core machines are well above exemption levels. The source has accepted stringent emission limits to avoid the requirements of 326 IAC 2-1.1-11 (New Source Toxics Control). Compliance with the VOC limitations in the permit now relies on the operation of an acid scrubber to control TEA emissions. Therefore, it is necessary to conduct a stack test to verify the minimum control efficiency of the scrubber. IDEM believes that it is reasonable and necessary to require a stack test for TEA emissions in order to demonstrate compliance with the limits necessary to render avoid the requirements of 326 IAC 2-1.1-11 (New Source Toxics Control). IDEM has deleted the sentence requiring that the tests be repeated every five years. The frequency of testing requirements will be determined during review of the source's Part 70 permit, which is currently under review by IDEM.

In the absence of source specific stack testing data, sources may use vendor information as a basis for certifying compliance. However, source specific stack test data is considered more accurate than vendor information, since vendor information is not specific for the exact process/equipment being used. IDEM may use any credible evidence as a basis for determining compliance with applicable rules and permit conditions.

Total potential VOC emissions from the core machines are well above exemption levels. The designation of a facility as a significant or insignificant activity is based on the <u>total</u> emissions from the activity in question, not just the emissions of one single pollutant, or in this case, a portion of the VOCs. The portion of the VOC emissions that are not TEA is estimated based on laboratory testing conducted by the Ohio Cast Metals Association (OCMA). However, these results are based on laboratory testing, not source specific stack tests. Stack test information on non-TEA VOC emissions from phenolic urethane core machines is scarce. The source has also accepted VOC emission limits to avoid the requirements of 326 IAC 8-1-6 (BACT) and 326 IAC 2-2 (PSD). As a result IDEM believes it is appropriate and necessary to require compliance testing for total VOCs, as well as TEA emissions.

The only changes to the permit as a result of this comment are shown below.

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up the Permittee shall perform testing as shown in the following table, using methods as approved by the Commissioner, in order to demonstrate compliance with condition D.1.2. ~~These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.~~ Testing shall be conducted in accordance with Section C - Performance Testing.

Comment #7

Condition D.1.6 (a) should be revised to read as follows: "Visible emission notations of the bin vent exhaust shall be performed once during normal daylight hours when loading of the core sand silo occurs. A trained employee shall record whether emissions are normal or abnormal."

Response #7

The requested change has been made as shown below.

D.1.6 Visible Emissions Notations

(a) Visible emission notations of the ~~baghouse~~ **bin vent** ~~stack~~ exhaust shall be performed once per shift during normal daylight ~~operations~~ **hours** when ~~exhausting to the atmosphere~~ **loading of the core sand silo occurs**. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

Comment #8

Conditions D.1.7, D.1.8, D.1.10(b), and D.1.10(c) should be deleted since there is no baghouse on the sand silo. There is only a bin vent on the silo.

Response #8

IDEM agrees to delete the requirement to perform parametric monitoring; however the source should inspect the bin vent on the silo in order to ensure that filters are not defective. Changes to the permit as a result of this comment are shown below.

~~D.1.7 Parametric Monitoring~~

~~The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the core sand handling system, at least once per shift when the core sand handling system is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 3.0 and 10.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.~~

~~The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.~~

D.1.8**7** ~~Baghouse~~ **Bin Vent** Inspections

An inspection shall be performed each calender quarter of ~~all bags controlling the core sand handling system when venting to the atmosphere~~ **the bin vent filter to the silo**. ~~A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors.~~ All defective ~~bags~~ **filters** shall be replaced.

D.1.~~10~~**9** Record Keeping Requirements

(a) To document compliance with Condition D.1.6, the Permittee shall maintain records of visible emission notations of the baghouse stack exhaust once per shift.

~~(b) To document compliance with Condition D.1.7, the Permittee shall maintain once per shift records of the following operational parameters during normal operation when venting to the atmosphere:~~

~~(1) Inlet and outlet differential static pressure; and~~

~~(2) Cleaning cycle operation.~~

(c) To document compliance with Condition D.1.8, the Permittee shall maintain records of the results of the inspections required under Condition D.1.8 and the dates the vents are redirected.

Comment #9

Revise Condition D.1.9 since there is a bin vent on the silo instead of a baghouse.

Response #9

IDEM has revised the condition as shown below.

D.1.9 Broken or Failed Bag Detection

In the event that bag failure has been observed:

~~(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.~~

~~(b)~~ ~~For single compartment baghouses~~ **In the event that filter failure of the bin vent has been observed, the** failed unit~~s~~ and the associated process will be shut down immediately until the failed unit~~s~~ ~~have~~ **has** been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). **Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.**

Comment #10

The first sentence of Condition D.1.10 (d) should be revised to read as follows: "To document compliance with Condition D.1.2., the Permittee shall maintain records of the TEA usage for the core room, the sand throughput of Mixer #1 and the sand throughputs for core machine #16 and #33". Dalton does not have the

capability to record the TEA usage for each core machine; however, the information listed in this condition will provide IDEM with the information necessary to determine compliance with the requirements in D.1.2.

Note: Subsequent to the source submitting the above comment, the source revised their application to include the installation and operation of an acid scrubber to control TEA emissions from the core machines.

Comment #10

Since the source has revised their application to include the use of an acid scrubber to control TEA emissions, it will not be necessary to measure TEA usages for each individual core machine. IDEM does agree that the sand throughput for the mixer #1 should be recorded, instead of the sand throughput for the core sand handling system. Changes to the condition are shown below.

(d) To document compliance with Condition D.1.2, the Permittee shall maintain records of the ~~TEA usages and sand throughputs for core machines #16 and #33 and~~ the sand throughput to the ~~core sand handling system~~ **mixer #1**. For all core wash solvents used in conjunction with the core wash dip tanks #16 and #33, the source shall keep the material safety data sheets (MSDS) or other documentation showing the VOC content of each solvent used.

Comments regarding the Technical Support Document (TSD)

Comment #1

Page 1
Detailed Description of Project – In the first full paragraph of this section, the second sentence should be changed as follows: "Calculations (shown in Appendix A) account for the potential emissions from the new core machine #33 as well as the potential increase in emissions from existing sand muller #1 and the core wash dip tanks." The word potential was added to show that these are only potential emissions, not actual emissions.

Response #1

There are no changes to the TSD after public notice; however, the correction is noted here in the addendum and the correct descriptions are included in the final permit.

Comment #2

Page 2
Detailed Description of Project – The following sentence in this section should be deleted. "Since [the] this new core machine, identified as core machine #33, is being constructed within 18 months after the start of construction of core machine #16, it is necessary to review the emissions from both machines in order to determine PSD applicability". There is no law or regulation that requires all construction conducted within a period of eighteen (18) months to be considered one project. Dalton agreed that the construction of the two core machines should be considered one project.

Response #2

Consistent with EPA guidance, IDEM typically does review permit applications submitted by the same source within the same 18 month time frame to determine whether they should be combined and reviewed as a single modification. IDEM believes this sentence is appropriate for inclusion in the TSD.

Comment #3

Page 2
Enforcement Issue – The NOV issued on November 29, 1999 did not allege violations of 326 IAC 2-2 (PSD) or 326 IAC 8-1-6 (BACT). It did allege violation of 326 IAC 2-1 (construction and operating permit requirements), 326 IAC 8-2-9 (miscellaneous metal coating) and 326 IAC 6-3-2 (process weight rate). This section should be changed to accurately reflect the allegations.

Response #3

There are no changes to the TSD after public notice; however, the correction is noted here in the addendum.

Comment #4

Page 2
Stack Summary – The stack number should be changed to T.

Response #4

There are no changes to the TSD after public notice; however, the correction is noted here in the addendum and the correct description is included in the final permit.

Comment #5

Page 3
The PM potential to emit on the chart on page 3 should read as 5.96 t/yr not 5.66 t/yr. The naphthalene potential to emit on page 3 should read as 0.01 t/yr not 0.016.]

Response #5

There are no changes to the TSD after public notice; however, the correction is noted here in the addendum and the correct emission limits are included in the final permit.

Comment #6

State Rule Applicability – (d) of this section should be deleted as the total VOC emissions excluding the TEA gas emissions are insignificant and considered exempt according to 326 IAC 2-1.1-3(d)(1)(D).

Dalton has included an updated Potential Emission Spreadsheet to illustrate that the core wash, parts spray and core box cleaner have the potential to generate less than 10 tons per year of VOC emissions. Therefore, these constituents are considered exempt according to 326 IAC 2.1.1-3(d)(1)(D).

The total VOC emission testing requirement for core machine #33 should be deleted since the total VOC emissions excluding the TEA gas emissions are insignificant and considered exempt according to 326 IAC 2-1.1-3(d)(1)(D).

Response #6

Total potential VOC emissions from the core machines are well above exemption levels. The designation of a facility as a significant or insignificant activity is based on the total emissions from the activity in question, not just the emissions of one single pollutant, or in this case, a portion of the VOCs. The portion of the VOC emissions that are not TEA is estimated based on laboratory testing conducted by the Ohio Cast Metals Association (OCMA). However, these results are based on laboratory testing, not source specific stack tests. Stack test information on non-TEA VOC emissions from phenolic urethane core machines is scarce. The source has also accepted VOC emission limits to avoid the requirements of 326 IAC 8-1-6 (BACT) and 326 IAC

2-2 (PSD). As a result IDEM believes it is appropriate and necessary to require compliance testing for total VOCs, as well as TEA emissions.

IDEM does not agree that the core wash, parting spray and core box cleaners are separate insignificant activities. All of these activities are an integral part of the operation of the core machine; therefore, all emissions from these activities have been aggregated together, along with the emissions from the binder used when producing the core. IDEM does not believe it is appropriate to divide up the emissions from the individual steps in the coremaking process. To do so could result in the inappropriate designation of the entire coremaking process as several individual insignificant activities.

Comment #7

Compliance Requirements - Paragraph #1 should be changed to read "Visible emissions notations of the core sand loading bin vent shall be performed during normal daylight hours during loading . . ." Paragraph #2 needs to be clarified regarding what emissions testing is being required and why. Paragraph 5 (2) needs to delete the word baghouses and replace it with the word unit. Paragraph 6 needs to be revised to require recording of the TEA usage for the core room.

Response #7

There are no changes to the TSD after public notice; however, the correction is noted here in the addendum and the correction has been made in the final permit.

Comment #8

(e) and (f) of this section should be revised as there is no baghouse controlling the core sand handling process. They should respectively read as follows: "The PM emissions from the bin vent controlling the core sand loading process shall not exceed 5.088 pounds per hour." "The PM10 emissions from the bin vent controlling the core sand loading process shall not exceed 2.968 pounds per hour".

Response #8

There are no changes to the TSD after public notice; however, the correction is noted here in the addendum and the correct description is included in the final permit.

On March 27, 2001, Michael Schall, Dalton Corporation, Kendallville Manufacturing, submitted comments on the proposed significant source modification to the Part 70 permit. A summary of the comments is as follows:

Comment #1

Dalton Corporation has decided to install an acid scrubber to control triethylamine (TEA) emissions from the all of the existing core machines as well as the new core machine #33. Dalton requests that IDEM rewrite the proposed permit to reflect this control device. The operation of this control device will eliminate the need for production limits to render the requirements of PSD not applicable. The control device will be sufficient to limit VOC emissions to less than 40 tons per year.

Response #1

IDEM has revised the permit as requested, to include a requirement for an acid scrubber; however, some production limits are still necessary in order to limit VOC emissions to less than 25 tons per year in order to render the requirements of 326 IAC 8-1-6 (BACT) not applicable. IDEM has also included compliance monitoring requirements for the scrubber. Changes to the permit as a result of this comment are shown below.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

One (1) Isocure core machine, identified as core machine #33, with a maximum capacity of 3 tons of cores per hour, with **the triethylamine (TEA)** emissions ~~uncontrolled~~ **controlled by a scrubber,** and exhausting to stack ~~74~~ **T**. A core box cleaner and parting spray will also be used with the core machine.

Notes: The new core machine will be installed as part of the Isocure core making process line #1, which also includes the following existing emission units:

(1) South muller (sand mixer) #1, with a maximum capacity of 12 tons of sand per hour, which supplies the sand/resin mixture to the core machines;
(2) Isocure core machines #30, #31, and #32, each with a maximum capacity of 3 tons of cores per hour**, with triethylamine (TEA) emissions controlled by a new acid scrubber,** and exhausting to stack ~~74~~ **T**;
(3) The core wash dip tanks, with emissions exhausting inside the building;
(4) Two (2) natural gas fired core drying ovens;
(5) One (1) natural gas fired double core drying oven; and
(6) The core sand handling system for the south mixer line, which consists of a fifty (50) ton capacity core sand silo controlled upon loading by a bin vent (which is integral to the system); the core sand is gravity fed via pipeline from the silo to an enclosed hopper. From there the core sand is gravity fed from the hopper to the mixer where it is mixed with resin. This entire process makes up the core sand handling system.

Note: The acid scrubber will be installed prior to the start of operation of core machine #33 and will control TEA emissions from core machine #33, as well as from all of the existing phenolic urethane core machines.

C.9 Pressure Gauge Specifications **and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

(a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(b) Whenever a condition in this permit requires the measurement of a flow rate or pH level, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

One (1) Isocure core machine, identified as core machine #33, with a maximum capacity of 3 tons of cores per hour, with **the triethylamine (TEA)** emissions ~~uncontrolled~~ **controlled by an acid scrubber,** and exhausting to stack ~~74~~ **T**. A core box cleaner and parting spray will also be used with the core machine.

Notes: The new core machine will be installed as part of the Isocure core making process line #1, which also includes the following existing emission units:

(a) South muller (sand mixer) #1, with a maximum capacity of 12 tons of sand per hour, which supplies the sand/resin mixture to the core machines;
(b) Isocure core machines #30, #31, and #32, each with a maximum capacity of 3 tons of cores per hour**, with triethylamine (TEA) emissions controlled by a new acid scrubber,** and exhausting to stack ~~74~~ **T**;
(c) The core wash dip tanks, with emissions exhausting inside the building;
(d) Two (2) natural gas fired core drying ovens;
(e) One (1) natural gas fired double core drying oven; and
(f) The core sand handling system for the south mixer line, which consists of a fifty (50) ton capacity core sand silo controlled upon loading by a bin vent (which is integral to the system); the core sand is gravity fed via pipeline from the silo to an enclosed hopper. From there the core sand is gravity fed from the hopper to the mixer where it is mixed with resin. This entire process makes up the core sand handling system.

The installation of the new core machine will result **in** an increased utilization of the existing sand muller #1, the existing core sand handling system, and the existing core wash dip tanks.

Note: The triethylamine (TEA) scrubber will be installed prior to the start of operation of core machine #33 and will control TEA emissions from core machine #33, as well as from all of the existing phenolic urethane core machines.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the core sand handling system shall not exceed 21.6 pounds per hour when operating at a process weight rate of 12.0 tons per hour. The pounds per hour limitation was calculated using the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

D.1.2 VOC, PM, PM10 and HAPs Limits [326 IAC 2-2] [326 IAC 8-1-6] [326 IAC 2-4.1-1]

In order to render the requirements of 326 IAC 8-1-6 (BACT), 326 IAC 2-4.1-1 (New Source Toxics Control), and 326 IAC 2-2 (PSD) not applicable, the following conditions shall apply:

~~(a) The sand throughput to the core machine #33 shall be limited to 2238 tons of core sand per 12 consecutive month period.~~

~~(b) The sand throughput to the core machine #16 shall be limited to 2238 tons of core sand per 12 consecutive month period.~~

~~(c)~~**(a)** The maximum TEA ~~usage rate~~ **emissions** for each of the core machines #16 and #33 shall not exceed ~~4.2~~ **0.252** pounds per ton of core sand.

~~(d)~~**(b)** The total VOC emissions from each of the core machines #16 and #33 shall not exceed ~~4.438~~ **0.49** pounds per ton of core sand.

~~(e)~~**(c)** The PM emissions from the bin vent controlling the core sand handling process shall not exceed ~~5.088~~ **1.354** pounds per ton of core sand.

~~(f)~~**(d)** The PM10 emissions from the bin vent controlling the core sand handling process shall not exceed ~~2.968~~ **0.790** pounds per ton of core sand.

~~(g)~~**(e)** The VOC emissions from the South muller #1 shall not exceed 0.65 pound per ton of core sand.

~~(h)~~**(f)** The sand throughput to the South muller #1 shall not exceed ~~9600~~ **35,450** tons per 12 consecutive month period.

~~(i)~~**(g)** The core wash solvent used in the core wash dip tanks #16 and #33 shall contain no VOCs.

Compliance with (a)~~, (b), and (c)~~ above is equivalent to TEA emissions of ~~9.4~~ **less than 10** tons per year; therefore, the requirements of 326 IAC 2-4.1-1 (New Source Toxics Control) will not apply. Compliance with ~~(e) and (f)~~ **(c) and (d)** above is equivalent to PM and PM10 emissions of 24 and 14 tons per year respectively; therefore, the requirements of 326 IAC 2-2 and 40 CFR 52.21 (PSD) will not apply. Compliance with (a), (b), ~~(d)~~**(e), (f), and** (g)~~, and (h)~~ above is equivalent to less than 25 tons per year of VOC; therefore the requirements of 326 IAC 8-1-6 (BACT) and 326 IAC 2-2 and 40 CFR 52.21 (PSD) will not apply.

This permit shall supersede Condition D.1.1 of Source Modification 113-11448-00004 issued on January 14, 2000.

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the **acid scrubber,** core sand handling system and bin vent filter.

Compliance Determination Requirements

D.1.4 Particulate Matter (PM)

(a) In order to comply with D.1.1 and D.1.2**(c) and (d)**, the bin vent filter for PM control shall be in operation and control emissions from the core sand loading system at all times that the core sand loading system is in operation.

(b) In order to comply with D.1.2(a) and (b), the acid scrubber for triethylamine (TEA) control shall be in operation and control emissions from the core machines #16 and #33 at all times that the either core machine is in operation.

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within 60 days after **core machine #33 achieves** ~~achieving~~ maximum production rate, but no later than 180 days after initial start-up the Permittee shall perform testing as shown in the following table, using methods as approved by the Commissioner, in order to demonstrate compliance with condition D.1.2. Testing shall be conducted in accordance with Section C - Performance Testing.

Facility	Pollutants	Limits
core machine #33	TEA ~~and total VOC~~	~~4.2~~ **0.252** pounds **TEA** per ton of core sand
	Total VOCs	~~4.438~~ **0.49** pounds **total VOC** per ton of core sand
South muller #1	VOC	0.65 pound per ton of core sand

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.9 Scrubber Parametric Monitoring

The Permittee shall monitor and record the pressure drop, flow rate, and pH level of the scrubber, at least once per shift. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the scrubber shall be maintained within the range of 0.5 to 3 inches of water or a range established during the latest stack test. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the flow rate shall be maintained at a minimum of 200 gallons per minute or a minimum flow rate established during the latest stack test. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pH level shall be maintained at a maximum level of 4.5 or a maximum level established during the latest stack test. The Compliance Response Plan for the scrubber shall contain troubleshooting contingency and response steps for when the pressure drop reading is outside of the normal range for any one reading, or the flow rate is below the normal minimum for any one reading, or the pH level is above the normal maximum for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instruments used for determining the pressure, flow rates, and pH levels shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.10 Scrubber Inspections

An inspection shall be performed each calender quarter of the scrubber controlling the core machines. All defective scrubber parts shall be replaced.

D.1.11 Scrubber Failure

In the event that scrubber failure has been observed:

(a) The affected process will be shut down immediately until the failed unit has been replaced. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.~~9~~**12** Record Keeping Requirements

(a) To document compliance with Condition D.1.6, the Permittee shall maintain records of visible emission notations of the bin vent exhaust once per shift.

(b) To document compliance with Condition D.1.7, the Permittee shall maintain records of the results of the inspections required under Condition D.1.7 and the dates the vents are redirected.

(c) To document compliance with Condition D.1.2**(f)**, the Permittee shall maintain records of the ~~TEA usages and sand throughputs for core machines #16 and #33 and the~~ sand throughput to the mixer #1. For all core wash solvents used in conjunction with the core wash dip tanks #16 and #33, the source shall keep the material safety data sheets (MSDS) or other documentation showing the VOC content of each solvent used.

(d) To document compliance with Condition D.1.9, the Permittee shall maintain records of the pressure drop, flow rate, and pH readings of the scrubber once per shift.

(e) To document compliance with Conditions D.1.10, the Permittee shall maintain records of the results of the inspections required under Conditions D.1.10 and the number and type of any parts replaced.

~~(d)~~**(f)** All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.~~10~~**13** Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.2 **(f)** ~~(a), (b), (c) and (h)~~ shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or the equivalent, within thirty (30) days after the end of the quarter being reported.

Note: The reporting forms have also been changed accordingly.

Comment #2

Dalton requests IDEM to remove the emission control efficiency for the core sand handling system supplying sand to the muller for core machine #33 from the existing proposed pending permit because it not feasible to determine a control efficiency. Additionally, Dalton has submitted revised calculations showing that the control device is not necessary in order to limit PM emissions to less than 25 tons per year and PM10 emissions to less than 15 tons per year. As a result, Dalton requests that the operation of the control device should not be a requirement in the permit.

Response #2

IDEM has reviewed the revised calculations as submitted by Dalton; however, IDEM does not agree that the control device is unnecessary. The South Muller #1 was installed in 1981, but was never permitted. The control device was necessary at the time of the installation in order limit PM and PM10 emissions to less than 25 and 15 tons per year respectively, in order to render PSD not applicable. Modifications to the South muller #1 do not allow another additional 25 and 15 tons per year of allowable PM and PM10 emissions without triggering PSD review. Rather, the unit is still subject to the same limits it should have received in a permit in 1981, which

are less than 25 and 15 tons per year of PM and PM10 respectively. However, as requested, the control efficiency of the control device is not stated. Only the emission limits are stated in the permit.

Comment #3

To more accurately describe the core sand handling system, please make the following changes to the description in Section A.2 and Section D of the permit.

The core sand handling system for the south mixer line, which consists of a fifty (50) ton capacity core sand silo controlled upon loading by a bin vent (which is integral to the system); the core sand is gravity fed via pipeline from the silo **into a vented sand heater through a pipe** to an enclosed hopper. From there the core sand is gravity fed from the hopper to the mixer where it is mixed with resin. This entire process makes up the core sand handling system.

Response #3

The requested changes have been made to Sections A.2 and D, as shown above.

Comment #4

For clarification purposes, please make the following changes to Condition D.1.2(e) and (f).

D.1.2 VOC, PM, PM10 and HAPs Limits [326 IAC 2-2] [326 IAC 8-1-6] [326 IAC 2-4.1-1]

In order to render the requirements of 326 IAC 8-1-6 (BACT), 326 IAC 2-4.1-1 (New Source Toxics Control), and 326 IAC 2-2 (PSD) not applicable, the following conditions shall apply:

(e) The PM emissions from the bin vent controlling the core sand ~~handling~~ **loading** process **and the vented sand heater** shall not exceed 5.088 pounds per ton of core sand.

(f) The PM10 emissions from the bin vent controlling the core sand ~~handling~~ **loading** process **and the vented sand heater** shall not exceed 2.968 pounds per ton of core sand.

Response #4

The requested change has been made, as shown above.

Upon further review IDEM has made the following changes to the permit.

Section B

(1) For clarification purposes, the following changes have been made to Condition B.4.

B.4 Significant Source Modification [326 IAC 2-7-10.5(h)]

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

(a) The attached affidavit of construction shall be submitted to the Office of Air Quality (OAQ),

Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed.

(b) If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.

(c) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

(d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.

(e) ~~However, in~~ **In** the event that the Title V application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:

(1) If the ~~Title V~~ **Part 70** draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the ~~Title V~~ **Part 70** draft.

(2) If the ~~Title V~~ **Part 70** permit has gone thru final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go thru a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final ~~Title V~~ **Part 70** permit at the time of issuance.

(3) If the ~~Title V~~ **Part 70** permit has not gone thru final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the proposed ~~Title V~~ **Part 70** permit, and the ~~Title V~~ **Part 70** permit will issued after EPA review.

(2) The following condition has been added to Section B of the permit.

B.5 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

(3) Changes have been made to condition C.2 stating that the preventive maintenance plan is required upon startup of the new emission unit.

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this approval, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) ~~within ninety (90) days after issuance of this approval~~ **upon startup of the new emission unit**, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond the Permittee's control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(4) For clarification purposes, the following changes have been made to Condition C.3.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) ~~The Permittee must comply with~~ **Permit amendments and modifications are governed by** the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this approval.

(b) Any application requesting an amendment or modification of this approval shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

(5) In order to make the condition more consistent with the rule language, the following changes have been made to Condition C.4.

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary **Alternative Opacity Limitations** ~~Exemptions~~), opacity shall meet the following, unless otherwise stated in this approval:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

(6) The following new condition has been added to Section C of the permit. All subsequent conditions in this section have been renumbered appropriately.

Compliance Requirements [326 IAC 2-1.1-11]

C.7 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

(7) For clarification purposes, the following changes have been made to Condition C.8.

C.8 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

If required by Section D, all monitoring and record keeping requirements not already legally required shall be implemented when operation begins. Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. ~~All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.~~

(8) For clarification purposes, the following changes have been made to Condition C.11.

C.11 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. **The compliance monitoring plan can be either an entirely new document, consist in whole of information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found.** ~~This compliance monitoring plan is comprised of~~: **The elements of the Compliance Monitoring Plan are:**

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this approval;

(3) The Compliance Monitoring Requirements in Section D of this approval;

(4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this approval; and

(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this approval. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared ~~within ninety (90) days after issuance of this approval~~ **upon startup of the new emission unit** by the Permittee and maintained on site, and is comprised of:

(A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this approval; and

(B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(b) For each compliance monitoring condition of this approval, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to ~~perform the actions detailed in the compliance monitoring conditions or failure to~~ take **reasonable** ~~the~~ response steps ~~within the time prescribed in the Compliance Response Plan,~~ may constitute a violation of the approval ~~unless taking the response steps set forth in the Compliance Response Plan would be unreasonable~~.

(c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:

(1) ~~The monitoring equipment malfunctioned, giving a false reading.~~ **A false reading occurs.** This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the approval conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the approval, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned to operating within "normal" parameters and no response steps are required.

(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

(9) For clarification purposes, the following changes have been made to Condition C.12.

C.12 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this approval exceed the level specified in any condition of this approval, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize **excess** emissions from the affected facility while the response actions are being implemented. IDEM, OAQ shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. ~~The Permittee shall submit a description of additional corrective actions taken to IDEM, OAQ within thirty (30) days of receipt of the notice of deficiency. IDEM, OAQ reserves the authority to use enforcement activities to resolve noncompliant stack tests.~~

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline. Failure of the second test to demonstrate compliance with the

appropriate approval conditions may be grounds for immediate revocation of the approval to operate the affected facility.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

General Changes throughout the permit.

(1) The Office of Air Management (OAM) has changed its name to the Office of Air Quality (OAQ). This change has been made throughout the permit.

DALTON CORPORATION
KENDALLVILLE MANUFACTURING FACILITY
Source Modification Number: 113-12446-00004

The sand muller #1 was constructed in 1981; therefore VOC emissions needed to be limited to below 25 tons per year even prior to this modification. The following calculation shows the throughput limit which was necessary in order to render the requirements of 326 IAC 8-1-6 (BACT) not applicable.

Emission Unit	Maximum Capacity (Tons/Hour)	Limited Capacity (Tons/Year)	Emission Factor	Emission Factor (lb/ton)		Potential Emissions PM (Tons/Year)	PM10 (Tons/Year)	SOx (Tons/Year)	NOx (Tons/Year)	Before Controls VOC (Tons/Year)	After Controls/Limits VOC (Tons/Year)	CO (Tons/Year)	Before Limits/Controls HAPs (Tons/Year)	After Limits/Controls HAPs (Tons/Year)
Sand Handling for South Muller #1	9		PM	3.600		141.912	21.287	0.000	0.000	0.000	0.000	0.000	0.000	0.000
			PM10	0.540										
						after controls	after controls							
						1.419	0.213							
Limited Emissions			PM	5.000										
			PM10	2.917										
South Muller #1	9	9600	VOC	0.650		0.000	0.000	0.000	0.000	25.623	3.1200	0.000	0.000	0.000
and all associated core machines				4.200						165.564	20.1600		phenol	phenol
				0.000						0.000	0.0000		0.010	0.010
Installed 1981				0.162						6.386	0.7776		napthalene	napthalene
				0.076						2.996	0.3648		0.000	0.000
Totals										200.569	24.4224		MDI	MDI

DALTON CORPORATION
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The following calculations show the increase associated with the new core machine.
The source is now installing a TEA scrubber to control TEA emissions from all of the existing core machines, and the new core machine.

Emission Unit	Maximum Capacity (Tons/Hour)	Limited Capacity (Tons/Year)	Emission Factor	Emission Factor (lb/ton)	Control Efficiency (%)	Potential Emissions PM (Tons/Year)	PM10 (Tons/Year)	SOx (Tons/Year)	NOx (Tons/Year)	Before Controls VOC (Tons/Year)	After Controls/Limits VOC (Tons/Year)	CO (Tons/Year)	Before Limits/Controls HAPs (Tons/Year)	After Limits/Controls HAPs (Tons/Year)
Isocure Core Machine 16	3		VOC	4.200	94.0%	0.000	0.000	0.000	0.000	55.188	3.311	0.000	55.188	3.311
Core Wash				0.000	0.0%					0.000	0.000		TEA	TEA
Parts Spray				0.162	0.0%					2.129	2.129			
Core Box Cleaner				0.076	0.0%					0.999	0.999		0.649	0.649
Total										58.315	6.439		methylene chloride	methylene chloride
Installed 1999													0.150 methanol	0.150 methanol
													0.050 xylene	0.050 xylene
Sand Handling for South Muller #1	12	35,450	PM	3.600	99.0%	189.22	28.382	0.000	0.000	0.000	0.000	0.000	0.000	0.000
99% Enclosure			PM10	0.540	99.0%	after controls 1.892	after controls 0.284							
						Limits (tons/yr) 24	Limits (tons/yr) 14							
						Limits (lbs/ton) 1.354	Limits (lbs/ton) 0.790							
South Muller #1	12	35,450	VOC	0.650	0.0%	0.000	0.000	0.000	0.000	34.164	11.5213	0.000	0.000 phenol	0.000 phenol
Installed 1981													0.000 napthalene	0.000 napthalene
													0.000 MDI	0.000 MDI
Isocure Core Machine 33	3		VOC	4.200	94.0%	0.000	0.000	0.000	0.000	55.188	3.311	0.000	55.188	3.311
Core Wash				0.000	0.0%					0.000	0.000		TEA	TEA
Parts Spray				0.162	0.0%					2.129	2.129			
Core Box Cleaner				0.076	0.0%					0.999	0.999		0.649	0.649
Installed 2000										58.315	6.439		methylene chloride	methylene chloride
													0.150 methanol	0.150 methanol
													0.050 xylene	0.050 xylene
Total						1.892	0.284	0.000	0.000	150.8	24.4	0.000	112.074	TEA 6.623 All HAPs 8.320
PSD						25	15	40	40		40	100		10
BACT						None	None	None	None		25	None		single HAP 25 combo HAP

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